

REMARKS

Status of the Claims

- Claims 2-26 and 34 are pending in the Application after entry of this amendment.
- Claims 1-26 are rejected by Examiner.
- Claims 9-10, and 18 are amended by Applicant.
- Claim 1 is cancelled.

Claim Rejections Pursuant to 35 U.S.C. §101

Claims 1-9 stand rejected under 35 U.S.C §101 because they are directed to non-statutory subject matter because the claims lack a useful, tangible, and concrete result.

Applicant cancels Claim 1 and includes new Claim 34 which is directed to a computer system having tangible elements. Applicant finds support for the amendment in Figure 1 and the related text as well as structural and functional aspects of the invention found throughout the as filed specification. As an Example, paragraphs 0048 and 0050 of the as-filed specification relate to the structural and functional aspects of the computer system. Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §101 rejection.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 1, 9, 10, 17, 18, and 26 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,405,316 to Krishnan et al. (Krishnan) in view of U.S. Patent No. 7,181,603 to Rothrock. Applicant respectfully traverses the rejection.

New Claim 34 is added and Claims 10 and 18 are amended. Support for the amendments can be found throughout the as-filed specification and at least in paragraphs 0048, 0050, Figure 3 and Figure 4 and the supporting text.

Krishnan teaches a method and system for modifying the behavior of existing executable code by injecting new code into an executable file is provided. The injection mechanism injects a reference to new code contained in a DLL into an existing executable file such that, when the code of the executable file is executed, the DLL is automatically

loaded and the new code is automatically executed. A reference to the DLL is injected into the executable file by either modifying an import table of the file, which causes automatic loading of the DLLs referred to therein, or by adding DLL loader code to the file. The DLL loader code uses an underlying operating system call to load the DLL. Further, the injection mechanism provides enhanced security by injecting security code and data into the executable file. The injected security code mechanism uses an incremental encryption and decryption process to encrypt and decrypt portions of the executable file in a more secure manner. (See Krishnan, abstract).

Further, Krishnan teaches at col. 8, lines 49-65:

In FIG. 6, executable file 604 represents the logical state of the executable file after the injection mechanism has inserted DLL loader code into the executable file 604. Specifically, the injection mechanism determines a location within the code in which to copy the DLL loader code, copies the DLL loader code, modifies the code entry point indicator 605 (located at address "xxx") to point to the newly added DLL loader code, and stores the value of the previous entry point indicator so that it can be accessed when the DLL loader code is executed. In this manner, when the executable file is executed, it will begin executing at the DLL loader code instead of the code entry point referred to by indicator 605. The DLL loader code will load the new DLL before executing the original application executable code 606. The injected DLL loader code 607 contains an instruction at the end of the DLL loader code to transfer control back to the original application executable code 606. (Krishnan, col. 8, lines 49-65).

Applicant notes that Krishnan modifies a code entry point to allow the DLL loader code to execute first and then to transfer control back to the original application. This differs from the present invention of Claim 34 which allows an application to access only a security agent that was instantiated by the execution of the executable file. The security agent then limits access to the object model of the claimed invention such that the object model is not exposed in a non-obfuscated form. Krishnan fails to disclose that the executable file, when executed, instantiates a security agent. Krishnan fails to disclose that an application, when requesting object model information, accesses only the instantiated security agent, where the security agent limits access to the object model to prevent exposure of the object model in non-obfuscated form as is presented in added Claim 34 and amended Claims 10 and 18.

Rothrock discloses a redirecting function that calls through a protected environment to effect secure linkage of program modules. In one embodiment of Rothrock, a program module, such as a player application for example, may make function calls to secure functions instead of to insecure operating system (OS) services, thereby deterring attacks on the player's calls to OS services. In one Rothrock embodiment, the new secure functions provide similar functionality to the replaced OS services. Providing a securely loaded function for calling by a program module in place of calling an insecure OS function includes obtaining object code for the securely loaded function from a signed binary description file, performing signature and integrity verification of the program module using the signed binary description file, loading the object code for the securely loaded function into memory, and updating an address for calling the securely loaded function by the program module. (See Rothrock, abstract).

Applicant observes that Rothrock discloses control of the playback of digital content via a player application. Applicant respectfully submits that such playback is generally considered by one of skill in the art to be a playback of the digital content in its full and clear form. This clear playback of digital data is considered one of the hallmarks of a good playback of digital content. However, the security agent of the present invention acts to limit the exposure of the information of the object model such that the request does not act to expose the object model in a non-obfuscated form.

Whereas Rothrock uses a player application to playback digital information in a non-obfuscated form, and whereas the present invention acts to prevent access to object model information that is not obfuscated, then Rothrock teaches away from the current invention. This results because the current invention only allows information from the object model to be presented in obfuscated form. This contrasts with Rothrock that plays back digital information in full, clear, and non-obfuscated form as is commonly expected with the playback of digital content.

Consequently, Rothrock not only fails to teach a security agent that does not allow the object model to be exposed in a non-obfuscated form, Rothrock actually teaches away from the claimed invention because the mechanisms of Rothrock fail to obfuscate digital content that is to be played back.

Since the combination of Krishnan and Rothrock does not teach or suggest all elements of independent Claims 10, 18, and 34, then the combination cannot render obvious these independent claims under 35 U.S.C. §103(a) per MPEP §2143.03. Accordingly, dependent Claims 2-9, 11-17, and 19-26, which rely on independent Claims 10, 18, and 34 are likewise rendered non-obvious. Thus, Claims 2-26 and 34 patentably define over the cited art.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 2-4, 11-12, and 19-21 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,405,316 to Krishnan et al. (Krishnan) in view of U.S. Patent No. 7,181,603 to Rothrock and in further view of U.S. Patent No. 5,974,549 to Golan. Applicant respectfully traverses the rejection.

Claims 2-4, 11-12, and 19-21 are dependent on independent Claims 34, 10, and 18 respectively which are shown to be patentably distinct from Krishnan and Rothrock as explained above. The addition of Golan does not cure the deficiency of Krishnan and Rothrock for failing to teach all of the elements of and teaching away from the pending independent claims. According to MPEP §2143.03, Claims 2-4, 11-12, and 19-21 are also rendered non-obvious for failure to teach all elements. Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of Claims 2-4, 11-12, and 19-21 because these claims patentably define over the cited art.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 5, 13, and 22 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,405,316 to Krishnan et al. (Krishnan) in view of U.S. Patent No. 7,181,603 to Rothrock and in further view of U.S. Patent No. 5,974,549 to Golan and in further view of US Publication No. 2003/0200459 to Seeman.

Claims 5, 13, and 22 are dependent on independent Claims 34, 10, and 18 respectively which are shown to be patentably distinct from the combination of Krishnan, Rothrock and Golan as explained above. The addition of Seeman does not cure the deficiency of failing to teach all of the elements of the independent claims. According to MPEP §2143.03, Claims 5,

13, and 22 are also rendered non-obvious. Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of Claims 5, 13, and 22 because these claims patentably define over the cited art.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 6, 7, 14, 15, 23, and 24 stand rejected under 35 U.S.C. §103(a) as unpatentable U.S. Patent No. 6,405,316 to Krishnan et al. (Krishnan) in view of U.S. Patent No. 7,181,603 to Rothrock and in further view of U.S. Patent No. 5,974,549 to Golan and in further view of US Patent No. 6,980,308 to Masaki. Applicant respectfully traverses the rejection.

Claims 6-7, 14, 15, and 23-24 are dependent on independent Claims 34, 10, and 18 which are shown to be patentably distinct from the combination of Krishnan, Rothrock, and Golan as explained above. The addition of Masaki does not cure the deficiency of failing to teach all of the elements of the independent claims. According to MPEP §2143.03, Claims 6-7, 14, 15, and 23-24 are also rendered non-obvious. Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of Claims 6-7, 14, 15, and 23-24 because these claims patentably define over the cited art.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 7, 16, and 25 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,405,316 to Krishnan et al. (Krishnan) in view of U.S. Patent No. 7,181,603 to Rothrock and in further view of US Publication No. 2002/0138727 to Dutta et al. (Dutta). Applicant respectfully traverses the rejection.

Claims 7, 16, and 25 are dependent on independent Claims 1, 10, and 18 respectively which are shown to be patentably distinct from the combination of Krishnan, Rothrock, and Golan as explained above. The addition of Dutta does not cure the deficiency of failing to teach all of the elements of the independent claims. According to MPEP §2143.03, Claims 7, 16, and 25 are also rendered non-obvious. Applicant respectfully requests withdrawal of the

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35 U.S.C. §103(a) rejection of Claims 7, 16, and 25 because these claims patentably define over the cited art.

Conclusion

In view of the above amendments and remarks, Applicant respectfully submits that the pending claims are not obviated by the cited art. Applicant respectfully requests reconsideration and withdrawal of the rejections. Applicant respectfully and earnestly solicits a Notice of Allowance for all pending claims.

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